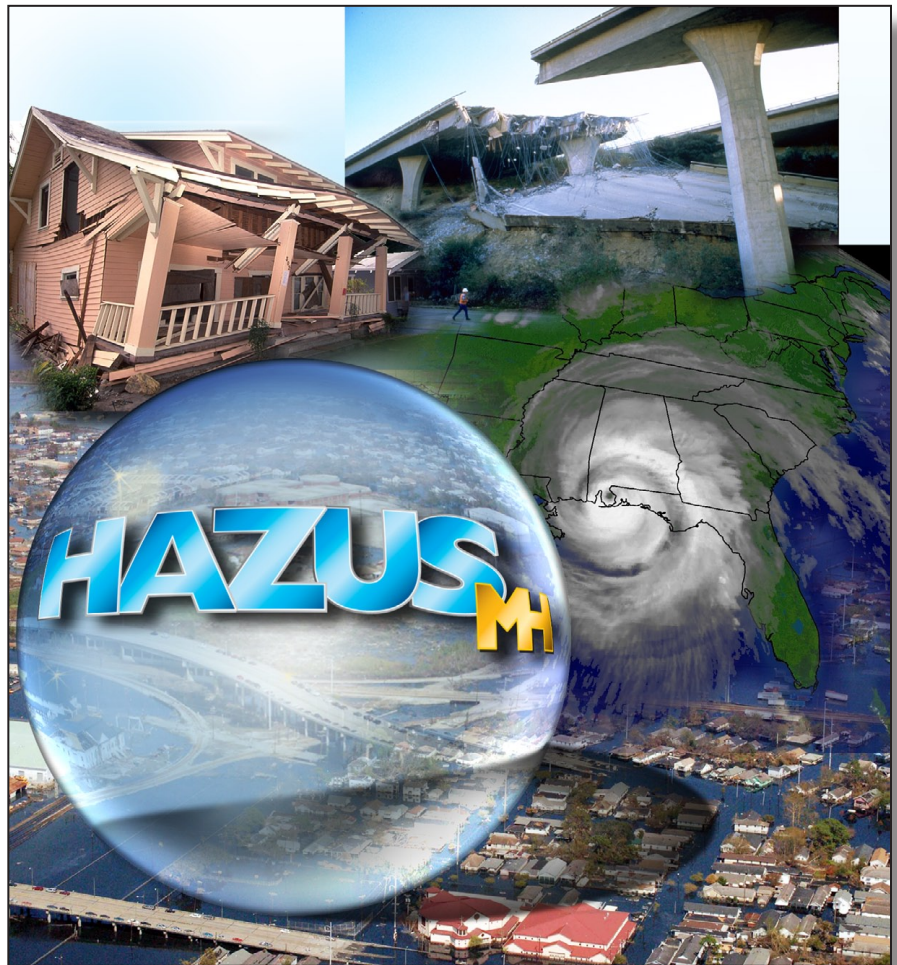# FEMA

HAZUS-MH:
A Crystal Ball for Disaster Mitigation

How many homes would be lost if this hurricane makes landfall as a Category 3?

What are the costs to repair infrastructure after a Magnitude 7 Earthquake?

If we spent $2 million to buy out these flood-prone homes, what is the cost-benefit?

Take action before hazard events become natural disasters. HAZUS-MH combines science, engineering and mathematical modeling with GIS technology to estimate losses of life and property—and shows those losses on a map. HAZUS-MH estimates impacts to the physical, social, and economic vitality of a community from earthquakes, hurricane winds and floods.

HAZUS-MH Five Step Risk Assessment Data Report

1	2	3	4	5
Identify Hazards	Profile Hazards	Inventory Assets	Estimate Losses	Evaluate Mitigation Options

Rally support for hazard mitigation. Create customized maps and graphics to show buildings, roads, rivers, coastlines, and infrastructure damages. By visualizing your hazard risks you can make a compelling case to decision makers about the need for mitigation.

Use HAZUS to help show cost-effectiveness in FEMA grant applications!

Easily import local data!

HAZUS' Comprehensive Data Management System (CDMS) now enables users to easily update and manage HAZUS-MH supplied inventory data for more refined analyses.

HAZUS-MH Capabilities	Earthquake Ground Shaking Ground Failure	Flood Frequency Depth Discharge Velocity	Hurricane Pressure | Missile | Rain
Direct Damage			
General Building Stock	✔	✔	✔
Essential Facilities	✔	✔	✔
High Potential Loss Facilities	✔		
Transportation Systems	✔	✔	
Utility Systems	✔	✔	
Induced Damage			
Fire Following	✔		
Hazardous Materials Release	✔		
Debris Generation	✔	✔	✔
Direct Losses			
Cost of Repair	✔	✔	✔
Income Loss	✔	✔	✔
Crop Damage		✔	
Casualties	✔	Generic Output	
Shelter Needs	✔	✔	✔
Indirect Losses			
Supply Shortages	✔	✔	
Sales Decline	✔	✔	
Opportunity Costs	✔	✔	
Economic Loss	✔	✔	

Included with HAZUS-MH Free!

- HAZUS methodology for earthquake, flood and hurricane wind

- Demo license for ArcGIS and discounts to purchase ESRI software

- National data sets containing:

  - ❑ Selected Boundary Maps: states, counties, census tracts

  - ❑ Aggregated Building Information: square footage, building count by occupancy

  - ❑ Essential Facilities: police and fire stations, schools, hospitals, emergency operations

  - ❑ High Potential Loss Facilities: dams, nuclear power plants

  - ❑ Transportation Systems: highway, railway, bus, port and harbor, ferry, airport

  - ❑ Lifeline Utility Systems: potable water; wastewater, oil, electric, power, communication systems

  - ❑ Hazardous Materials: 1999 version of EPA's Toxic Release Inventory database

  - ❑ Agricultural Products: crops by type, average yield, unit and harvest price

  - ❑ Vehicle Data: parking generation rates

  - ❑ Demographic Data: housing and population stats (income, population, occupancies, housing units based on Census 2000)

Take another look at HAZUS-MH

Led by FEMA and the National Institute of Building Sciences, HAZUS has been tuned and improved for more than 17 years by top scientific and technical experts. If you've tried an earlier version of HAZUS and have stopped using it, it's time to take another look. New capabilities and improved functionality make it easier to use and more accurate than ever.

Get HAZUS before the next disaster strikes

If you're an emergency manager, GIS specialist, geologist, state or local planner, or anyone involved in risk assessment, you need HAZUS-MH.

Order your free copy of HAZUS-MH from FEMA's Publication Warehouse (800) 480-2520 or visit www.fema.gov/plan/prevent/hazus to learn more.